

Pivoting Frame Suspension Scooter

Abstract: An improved motorized scooter utilizing suspension provided with a large tubular chassis having two central brackets, supporting a rider's platform. The front of the tubular chassis bends upward through a notch in the platform upward above the front wheel to support a steering head tube. The steering head tube supports a fork which holds the front wheel. The rear wheel is contained in a supporting bracket which also holds the engine relative to the rear wheel allowing it to be operatively connected. The central tubular member is pivoted somewhere along its length so that the frame halves can rotate in respect to each other along the pivot point. The long lever arm provided by utilizing the frame as a suspension element allows for greater terrain following characteristics due to the increased leverage. Rotation between frame halves is resisted by a shock absorber with either end connected to the respective frame halves. When driving over uneven terrain, the weight of the rider forces down upon the rider's platform which is connected to one or the other frame halves, this suspension system allows the rider to transverse uneven terrain with greater comfort, control and safety.